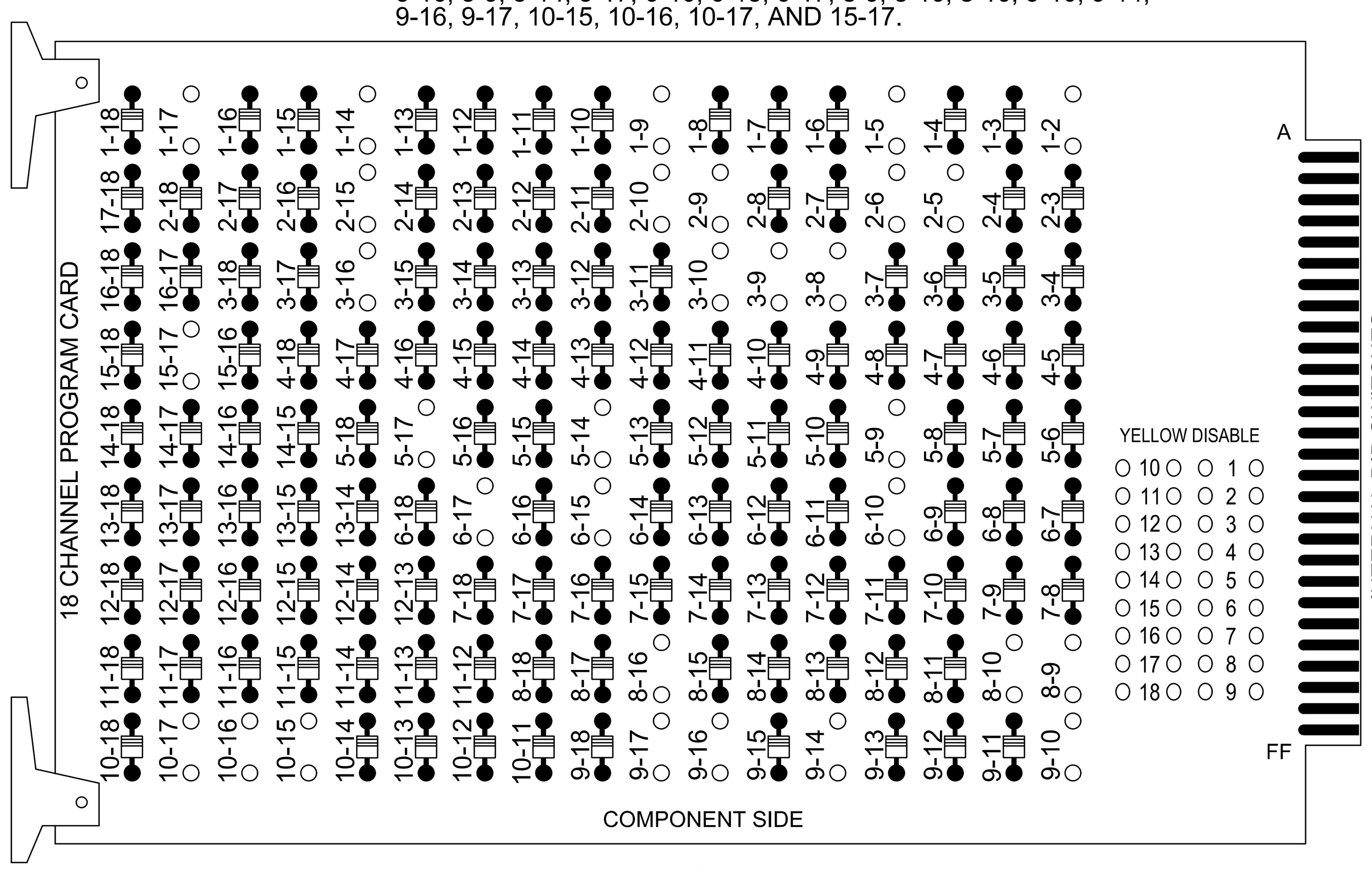
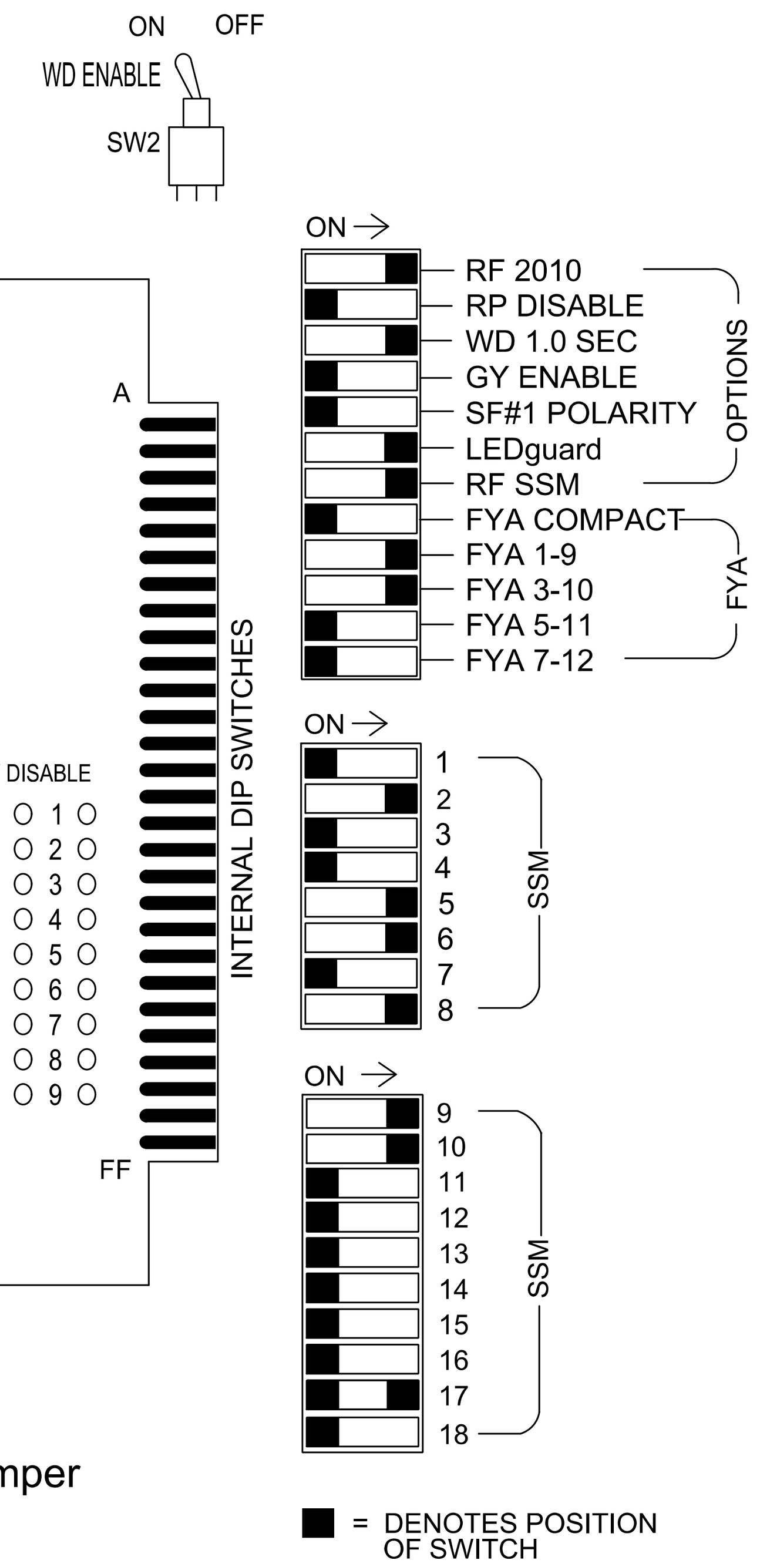
PROJECT REFERENCE NO.	SHEET NO.
U-5797	Sig. 27.1

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS: 1-2, 1-5, 1-9, 1-14, 1-17, 2-5, 2-6, 2-9, 2-10, 2-15, 3-8, 3-9, 3-10, 3-16, 5-9, 5-14, 5-17, 6-10, 6-15, 6-17, 8-9, 8-10, 8-16, 9-10, 9-14, 9-16, 9-17, 10-15, 10-16, 10-17, AND 15-17.





REMOVE JUMPERS AS SHOWN

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
2. Program controller to start up in phase 2 Green No Walk and phase 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
4. The cabinet and controller are part of the Signal System #D06-17 Lumberton US 301 and SR 1997 (Fayetteville Road).

EQUIPMENT INFORMATION

Controller...2070LX
Cabinet..332 w/ Aux
Software..Q-Free MAXTIME
Cabinet Mount......................................Base
Output File Positions...........................18 With Aux. Output File
Load Switches Used.............................S1, S2, S4, S6, S7, S8, S9, S11, S12, AUX S1, AUX S2, AUX S3
Phases Used..1, 2, 3, 3PED, **4, 4PED, 5, 6, 6PED
Overlap "1"...*
Overlap "2"...*
Overlap "3"...NOT USED
Overlap "4"...NOT USED
Overlap "5"...*
Overlap "7"...*
Overlap "8"...*
Overlap "9"...*

*See overlap programming detail on sheet 2
**Phase used for timing purposes

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	OL7	2	2 PED	3	4	4 PED	OL8	6	6 PED	7	OL9	3 PED	OL1	OL2	OL5	OL3	OL4	SPARE
SIGNAL HEAD NO.	33★	21,22 23	NU	64★	NU	P41 P42	51	61,62 63	P61 P62	NU	31,32	P31 P32	33★	64★	11	NU	NU	NU
RED		128						134					A121	A124				
YELLOW	*	129		*				135										
GREEN		130						136										
RED ARROW							131				107				A111			
YELLOW ARROW							132				108		A122	A125	A112			
FLASHING YELLOW ARROW													A123	A126				
GREEN ARROW	127			118			133				109				A113			
(hand)						104			119			110						
(walking person)						106			121			112						

NU = Not Used
* Denotes install load resistor. See load resistor installation detail this sheet.
★ See pictorial of head wiring in detail this sheet.

INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	NOT USED	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L												Ø4 PED DC ISOLATOR	Ø3 PED DC ISOLATOR	ST DC ISOLATOR
"J"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L														

MULTIZONE DETECTION

EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

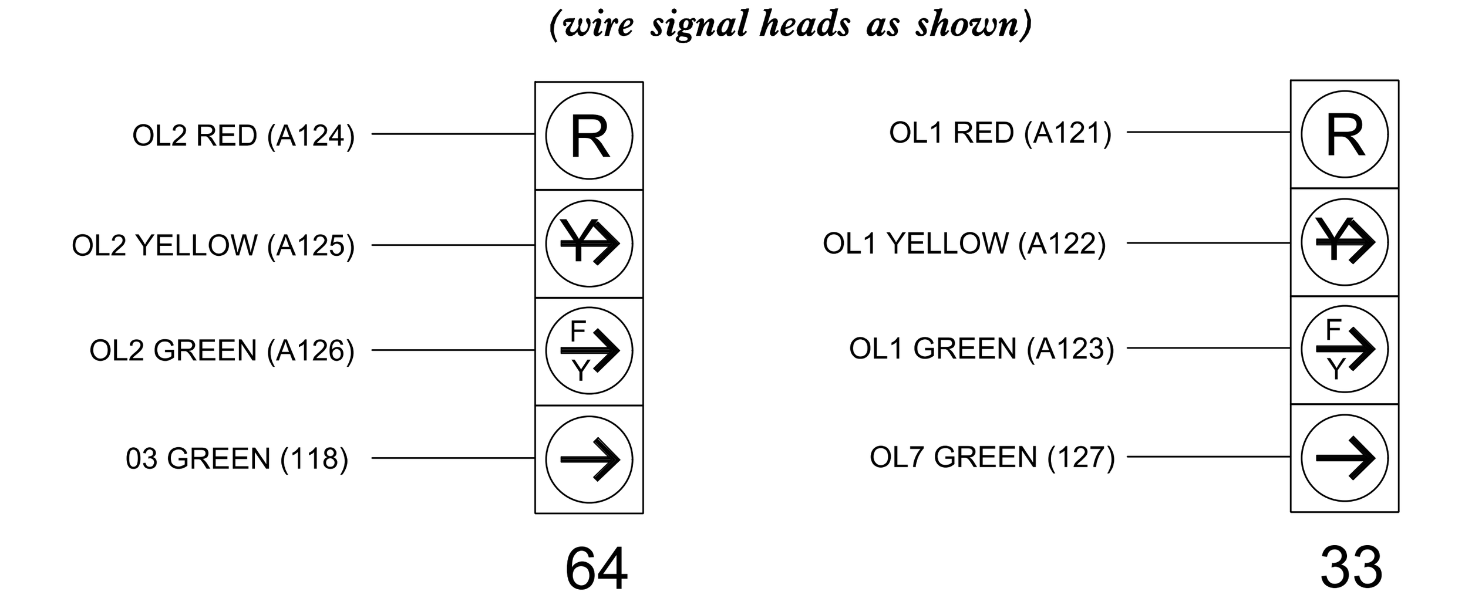
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE
PED PUSH BUTTONS						
P41,P42	TB8-5,6	I12L	69	35	4	PED 4
P61,P62	TB8-7,9	I13U	68	34	6	PED 6
P31,P32	TB8-8,9	I13L	70	36	8	PED 3

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



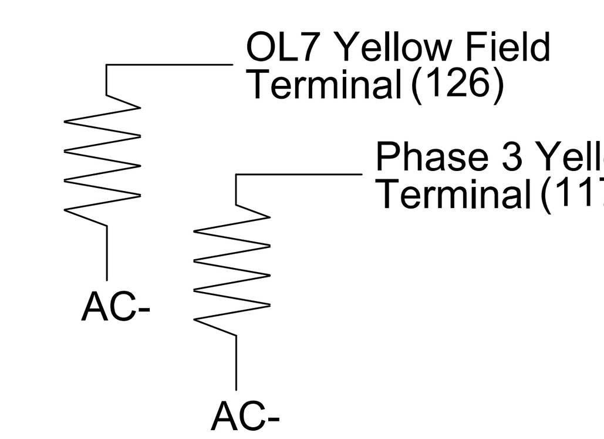
SPECIAL DETECTOR NOTE

Install a multizone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 06-0537
DESIGNED: June 2025
SEALED: 6/11/2025
REVISED:

Final Design
Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:
Transportation Mobility and Safety Division
ITS & Signals Management Section
State of North Carolina Department of Transportation
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1997 (Fayetteville Road)
at
SR 1984 (Linkhaw Road)

Division 6 | Robeson County | Lumberton

PLAN DATE: June 2025	REVIEWED BY: H.M. Surti
PREPARED BY: R.L. Aristondo	REVIEWED BY: T.M. Moody

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 040329
TRENT M. MOODY

DocuSigned by: Trent Moody
45EA1D4836704E0...
SIGNATURE
DATE 6/11/2025

SIG. INVENTORY NO. 06-0537

6/11/2025
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